Chapter 3

History of Medicine

History of Medicine

Objectives:

At the end of this presentation, students shall have learned:

- Cultural Heritage in Medicine
- Medical Specialists in History
- History of Medical Educations
- History of Attitudes Towards Medicine
- Historical Medical Treatments
- Significant Contributions To Medicine

The informed and caring health professional will recognize that a person's culture and ethnic heritage play an enormous role in any kind of health care.



Mesopotamian cultures believed that illness was a punishment by the gods for violation of a moral code. Ancient Egyptians believed the body was a system of channels for air, tears, blood, urine, sperm, and feces.



Ancient Mesopotamian Medicine

The ancient Chinese cultures examined and carefully monitored the pulse in each wrist. It was believed that the pulse had hundreds of characteristics important in medical treatment. There were five methods of treatment to bring a person to the right track. They were:



Chinese Herbal Medicine

- Cure the spirit
- Nourish the body
- Give medications
- Treat the whole body
- Use acupuncture and moxibustion



Chinese Herbal Medicine

Medicine's history gives early evidence of many "specialists" in the healing arts. They were known by various names:

- Witch doctors
- Medicine men and women
- Shamans or healing priests
- Physicians

These healers were more than ancestors of the modern physician, however ,for they performed many functions that involved the welfare of the entire community or village.

By today's standards, they were considered to be equivalent to spiritual advisers, social workers, counselors and teachers.



Whereas women were accepted as healers in primitive societies, later cultures reduced their status to that of being allowed to care only for women and to assist in childbirth.

In any culture that granted women only secondary status, women were also considered unqualified to become physicians.



In Muslim society, the reluctance of Arabic physicians to violate social taboo and touch the genitals of female strangers further encouraged relegating the practice of obstetrics and gynecology to midwives.



Women were not accepted in Western culture until the nineteenth and twentieth century.

In the United States, the first female physician was Elizabeth Blackwell, who was awarded her degree in 1849.

> Elizabeth Blackwell 1821-1910 First Female Physician in the US

Although she was snubbed by the public, she soon earned the respect of her colleagues. When she refused to be absent from class when the male reproductive system was discussed, her fellow male students supported her actions.



Elizabeth Blackwell 1821-1910 First Female Physician in the US

It appears that some form of payment was expected for medical services rendered.

In many instances, the payment was dependent on the status of the physician as well as the patient.



In some cultures, a physician who was not successful in treating a patient was punished by forcing that physician to treat only those too poor to pay.



During the rise of Christianity, emphasis was placed on the soul rather than on the body; therefore, early Christian monks held great control over medicine. This is evidenced by St. Benedict of Nursia (480-554), who forbade the study of medicine. The care of the sick was encouraged, but only through prayer and divine intervention.



St. Benedict of Nursia

At the same time, Islam moved to preserve the classical learning that had been achieved in medicine, and practitioners were not only able to return to the same methods as those earlier practiced by Greeks and **Roman cultures, but medical** study was now encouraged.



Medieval Islamic Medicine

During the 9th century, medical universities emerged. By the time the renaissance was at its height in mid-fifteenth century, the physician had become licensed, was receiving great status, and was attending the ill with velvet bonnet and fur-trimmed cloak.



Medieval Medical Treatments

Art and science were more likely related during the Renaissance than any other period.

Michelangelo spent years on careful human dissection, the details of which are evidenced in his paintings at the Sistine Chapel.

Leonardo Da Vinci made anatomical preparations from which he produced drawings representing the skeletal, muscular, nervous and vascular systems.



Michelangelo 1475-1564



Leonardo Da Vinci 1452-1519

Isolation and Abandonment

A sick person might be excluded from daily activity, but was likely to be shunned if the disease was believed to be a punishment by the gods for mortal sin. This forced isolation may well have been beneficial to the community.



Good Samaritans

The New Testament Parable of the Good Samaritan helped establish a nexus between the early Church and a concern for the sick. It was believed that though the body might be waste and foul with disease, the purity of the soul guaranteed life everlasting..



Native Americans

Native Americans had various feelings about illness. The ill were treated with kindness among the Navajo and Cherokee, and some who recovered from serious illness was considered to have extraordinary powers.



Eskimos

If a tribe was faced with famine, suicide by the aged and infirm was considered the highest form of bravery. The Eskimos put their adults unprotected onto ice floes.



 Roman and Greek Attitudes toward illness.

Neither the Romans nor the Greeks treated the hopelessly ill or deformed, and unwanted infants were disposed of quickly or left to die.



 Today's right to choose life or death.

The Western medical community and the consumers it serves are heatedly debating the right to choose life or death and the legality of physician-assisted suicide, which is acceptable in many other cultures.



Fear of disease such as AIDS.

Many individuals are still fearful of any illness they do not understand or that they perceive as threatening their health. AIDS is a good example.

The fear is often accompanied by public ill treatment of the individuals suffering from certain diseases.



The writings of Ancient Egypt reveal that when a woman suspected she was pregnant, she urinated over a mixture of wheat and barley seeds combined with dates and sands. If any of the grains sprouted, she was surely pregnant. If the wheat grew, she should have a boy. If the barley grew, it would be a girl.

Today, urine is still used in modern tests to determine pregnancy.

Early medical treatments were crude.

Malaria, diphtheria, tuberculosis, typhoid and dysentery were commonplace. Leprosy was prevalent, and venereal disease was rife.

Death toll from small pox was high particularly among children.

In the 18th century, Edward Jenner made a great contribution to the prevention of disease by discovering a method of vaccination against smallpox.

Edward Jenner

Louise Pasteur was sometimes referred to as the father of preventive medicine as a result of his work in recognizing the relationship between bacteria and infectious diseases.



Louis Pasteur (1822-1895)

Joseph Lister revolutionized surgery because of his belief in Pasteur's use of carbolic acid as an antiseptic spray. He insisted that all instruments and physicians' hands be washed with the solution.



Joseph Lister (1827-1912)

Robert Koch used the culture plate method for isolating bacteria and demonstrated how cholera was transmitted by food and water. His discovery changed the way health departments cared for persons with infectious disease.



Robert Koch (1843-1910)

Significant Contributions to Medicine

Hippocrates in the physician frequently recalled from the Greek culture. His writing s have contributed much to today's culture. He is remembered for his well known Hippocratic Oath, which establishes guidelines for a physician's practice.



Hippocrates (c.460 B.C. – 377 ZB.C.

Significant Contributions to Medicine

Although few physicians swear to this oath today when they embark on their medical career, it is still recognized for its validity and wisdom.



Hippocrates (c.460 B.C. – 377 ZB.C.

The Hippocratic Oath



The Hippocratic Oath, Old Version

I swear by Apollo Physician and Asclepios and Hygeia and Panaceia and all the gods and goddesses, making them my witnesses, that I will fulfill according to my ability and judgment this oath and this covenant:

To hold him who has taught me this art as equal to my parents and to live my life in partnership with him, and if he is in need of money to give him a share of mine, and to regard his offspring as equal to my brothers in male lineage and to teach them this art - if they desire to learn it - without fee and covenant; to give a share of precepts and oral instruction and all the other learning to my sons and to the sons of him who has instructed me and to pupils who have signed the covenant and have taken an oath according to the medical law, but no one else.

I will apply dietetic measures for the benefit of the sick according to my ability and judgment; I will keep them from harm and injustice.

I will neither give a deadly drug to anybody who asked for it, nor will I make a suggestion to this effect. Similarly I will not give to a woman an abortive remedy. In purity and holiness I will guard my life and my art.

I will not use the knife, not even on sufferers from stone, but will withdraw in favor of such men as are engaged in this work.

Whatever houses I may visit, I will come for the benefit of the sick, remaining free of all intentional injustice, of all mischief and in particular of sexual relations with both female and male persons, be they free or slaves. What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men, which on no account one must spread abroad, I will keep to myself, holding such things shameful to be spoken about.

If I fulfill this oath and do not violate it, may it be granted to me to enjoy life and art, being honored with fame among all men for all time to come; if I transgress it and swear falsely, may the opposite of all this be my lot.

The Hippocratic Oath, Modern Version

I swear to fulfill, to the best of my ability and judgment, this covenant:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help. The main points covered in this presentation are taken from the book "Administrative Medical Assisting, 3d Edition," by Wilburta Q. Lindh, Marilyn S. Pooler, Carol D. Tamparo, and Barba M. Dahl. This presentation is intended solely for the purpose of educating the students at CCI Training Center and not for the infringement of copyright laws.

